

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

Applicant(s): Andrew W. Shyjan

COMPOSITIONS AND METHODS FOR THE DIAGNOSIS,
PREVENTION AND TREATMENT OF TUMOR
PROGRESSION

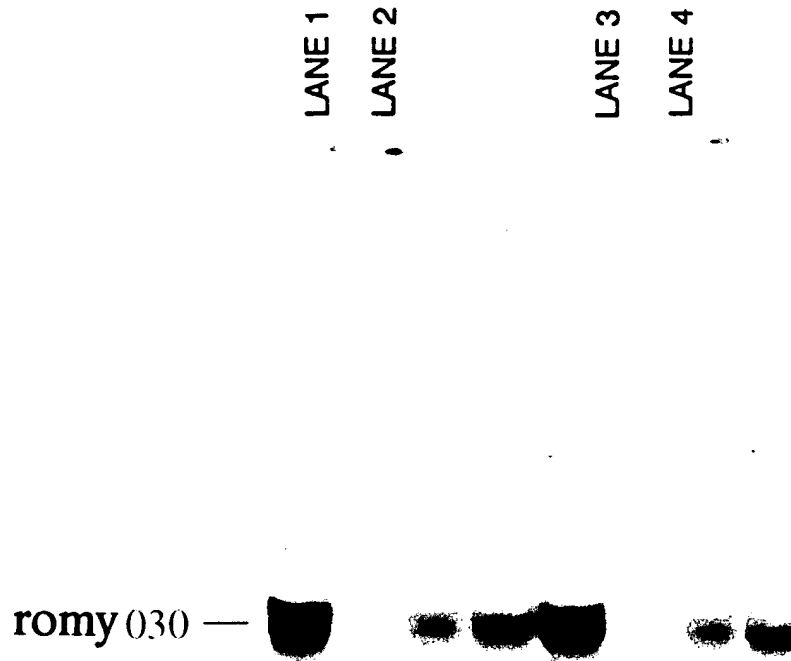


FIG. 1

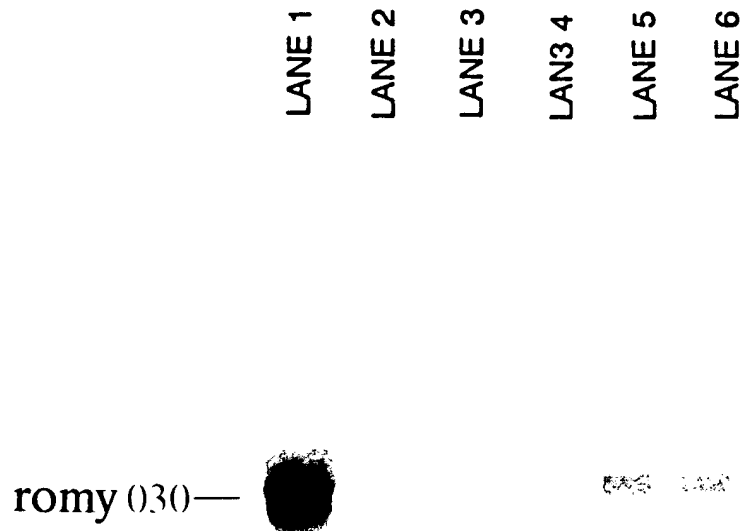


FIG. 4

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

romy030

GGTGCTGGAGTACCTCATGGGCGGTGCCCTACCGCTGCAACTACACTCGGAAAAGCTTCCGGACTCT
CTACAACAACCTTGTTGGCCCTAAGAGGGTAGAGCTCAGCAGACACACAGTGTCTGTGCCTCCC
AGAGTAACATGTGGTTCCTTGATGTGCTTCCCCAAAGCCACCTGTGCAGATG

(SEQ ID NO: 1)

FIG. 2

APPROVED	O.G. FIG.	
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AAGGAGGCTAGGCTGACCCCTTCCCGCTTGCTCAGCAGCTGAGGCGAGGCTCAGAAAGCAGTGGATAGAGAAAGACATTTTGC 80
 AAAGGGAATGCATCTTTGTAAATCCAGTACAAAGACCCCTAACAGATGTTGCTGTTGCTCAGCTCACTAAACCCAGCACAT 160
 CCCCCCTTGGCGAGTGGGCTCCAGCACAAACAGGAGAGGACACCAAGCAGGACGACACGACGCTCGGGAATGGTCTG 240
 TCAGCAACACACCCAGAGCTACCCAAACAGACTCCTATGGGATCTTTGAAATTCAGGGTGGGGTTACTTCCAAATAAAGCC 320

 ATG TAC ATC CGA GTC TCC TAC GAC ACC AAG CCA GAT TCC CTG CTC CAC CTC ATG GTG AAG 380
 M Y I R V S Y D T K P D S L L H L M V K 20

 GAC TGG CAG CTG GAG CTC CCG AAG CTC TTG ATA TCT GTG CAC GGA GGC CTC CAA AGC TTC 440
 D W Q L E L P K L L I S V H G G L Q S F 40

 GAG ATG CAG TCC AAA CTG AAG CAG GTG TTT GGG AAA GGT CTG ATC AAG GCT GCC ATG ACC 500
 E M Q S K L K Q V F G K G L I K A A M T 60

 ACG GCG GCG TGG ATC TTC ACC GGG GGT GTG AGC ACT GGT GTG GTC AGC CAT GTG GGG GAT 560
 T G A W I F T G G V S T G V V S H V G D 80

 GCC TTG AAA GAC CAC TCC AAG TCC AGA GGC CGG CTC TGT GCT ATA GGA ATT GCT CCC 620
 A L K D H S S K S R G R L C A I G I A P 100

 TGG GGC ATG GTG GAG AAC AAG GAA GAC CTG ATT GGA AAA GAT GTA ACA AGA GTC TAT CAG 680
 W G M V E N K E D L I G K D V T R V Y Q 120

 ACC ATG TCC AAC CCT CTG AGC AAG CTC TCT GTG CTC AAC AAT TCC CAC ACT CAC TTC ATC 740
 T M S N P L S K L S V L N N S H T H F I 140

 TTG GCT GAC AAC GGC ACC CTG GGC AAG TAT GGT GCT GAG GTG AAG CTT CGA AGA CAG CTG 800
 L A D N G T L G K Y G A E V K L R R Q L 160

 GAA AAA CAC ATC TCC CTG CAG AAG ATC AAC ACA AGG CTG GGC CAG GGT GTA CCT GTC GTG 860
 E K H I S L Q K I N T R L G Q G V P V V 180

 GGC CTA GTG GTA GAA GGT GGT CCT AAC GTG GTT TCT ATC GTC CTG GAG TAT CTC AAA GAA 920
 G L V V E G G P N V V S I V L E Y L K E 200

FIG. 3A

APPROVED BY DRAFTSMAN	O.G. FIG.	
	CLASS	SUBCLASS

[illegible]

FIG. 3C

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

ACTCATATTAGGNTCGAGCGGCCGCCGGGAGGTTTGAGCTGTGCGCTCTCCATTCCACTGCTGTGGCAGGGTCAGA
 AATCTTGGATAGAGAAACCTTTTGGAAACGGGAATGATCTTTGTAAATTCCTAGCACGAAAGACTCTAACAGGTGTG
 CTGTGGCCAGTTTACCAACCCAGCATATCCCCCTCTGCGCAAGTGCACACCCAGCAAAAATGAAGAGGAAAGCAAAACAG
 GTGGAGACTCAGCCTGAGAAATGGTCTGTGCAAGCACACCCAGAGCTACCCAACAGATTCTCTATGGAGTCTCTTGAATT
 CCAGGTGGCGGATATTCCAATAAAGCC

M Y I R V S Y D T K P D S L L H L M V K 20
 ATG TAT ATC CGT GTA TCC TAT GAC ACC AAG CCA GAC TCA CTG CTC CAT CTC ATG GTG AAA 60

D W Q L E L P K L L I S V H G G L Q N F 40
 GAT TGG CAG CTG GAA CTC CCC AAG CTC TTA ATA TCT GTG CAT GGA GGC CTC CAG AAC TTT 120

E M Q P K L K Q V F G K G L I K A A M T 60
 GAG ATG CAG CCC AAG CTG AAA CAA GTC TTT GGG AAA GGC CTG ATC AAG GCT GCT ATG ACC 180

T G A W I F T G G V S T G V I S H V G D 80
 ACC GGG GCC TGG ATC TTC ACC GGG GGT GTC AGC ACA GGT GTT ATC AGC CAC GTA GGG GAT 240

A L K D H S S K S R G R V C A I G I A P 100
 GCC TTG AAA GAC CAC TCC TCC AAG TCC AGA GGC CGG GTT TGT GCT ATA GGA ATT GCT CCA 300

W G I V E N K E D L V G K D V T R V Y Q 120
 TGG GGC ATC GTG GAG AAT AAG GAA GAC CTG GTT GGA AAG GAT GTA ACA AGA GTG TAC CAG 360

T M S N P L S K L S V L N N S H T H F I 140
 ACC ATG TCC AAC CCT CTA AGT AAG CTC TCT GTG CTC AAC AAC TCC CAC ACC CAC TTC ATC 420

L A D N G T L G K Y G A E V K L R R L L 160
 CTG GCT GAC AAT GGC ACC CTG GGC AAG TAT GGC GCC GAG GTG AAG CTG CGA AGG CTG CTG 480

E K H I S L Q K I N T R L G Q G V P L V 180
 GAA AAG CAC ATC TCC CTC CAG AAG ATC AAC ACA AGA CTG GGG CAG GGC GTG CCC CTC GTG 540

G L V V E G G G C C T A A C G T G T C C A T C G T G A A T A C T G C A A G A A 200
 GGT CTC GTG GTG GAG GGG GGC CCT AAC GTG GTG TCC ATC GTC TTT GAA TAC CTG CAA GAA 600

FIG. 5A

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

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Applicant(s): Andrew W. Shyjan

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COMPOSITIONS AND METHODS FOR THE DIAGNOSIS,
PREVENTION AND TREATMENT OF TUMOR
PROGRESSION

E P P I P V V I C D G S G R A S D I L S 220
 GAG CCT CCC ATC CCT GTG GTG ATT TGT GAT GGC AGC GGA CGT GCC TCG GAC ATC CTG TCC 660

 F A H K Y C E E G G I I N E S L R E Q L 240
 TTT GCG CAC AAG TAC TGT GAA GAA GGC GGA ATA ATA AAT GAG TCC CTC AGG GAG CAG CTT 720

 L V T I Q K T F N Y N K A Q S H Q L F A 260
 CTA GTT ACC ATT CAG AAA ACA TTT AAT TAT AAT AAG GCA CAA TCA CAT CAG CTG TTT GCA 780

 I I M E C M K K K E L V T V F R M G S E 280
 ATT ATA ATG GAG TGC ATG AAG AAG AAA GAA CTC GTC ACT GTG TTC AGA ATG GGT TCT GAG 840

 G Q Q D I E M A I L T A L L K G T N V S 300
 GGC CAG CAG GAC ATC GAG ATG GCA ATT TTA ACT GCC CTG CTG AAA GGA ACA AAC GTA TCT 900

 A P D Q L S L A L A W N R V D I A R S Q 320
 GCT CCA GAT CAG CTG AGC TTG GCA CTG GCT TGG AAC CGC GTG GAC ATA GCA CGA AGC CAG 960

 I F V G P H W T P L G S L A P P T D S 340
 ATC TTT GTC TTT GGG CCC CAC TGG ACG CCC CTG GGA AGC CTG GCA CCC CCG ACG CAC AGC 1020

 K A T E K E K K P P M A T T K G G R G K 360
 AAA GCC ACG GAG AAG GAG AAG CCA CCC ATG GCC ACC ACC AAG GGA GGA AGA GGA AAA 1080

 G K G K K K G K V K E E V E E T D P R 380
 GGG AAA GGC AAG AAG AAA GGG AAA GTG AAA GAG GAA GTG GAG GAA GAA ACT GAC CCC CGG 1140

 K I E L L N W V N A L E Q A M L D A L V 400

FIG. 5B

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

AAG ATA GAG CTG AAC TGG GTG AAT GCT TTG GAG CAA GCG ATG CTA GAT GCT TTA GTC	1200
L D R V D F V K L L I E N G V N M Q H F	420
TTA GAT CGT GTC GAC TTT GTG AAG CTC CTG ATT GAA AAC GGA GTG AAC ATG CAA CAC TTT	1260
L T I P R L E E L Y N T R L G P P N T L	440
CTG ACC ATT CCG AGG CTG GAG GAG CTT TAT AAC ACA AGA CTG GGT CCA CCA AAC ACA CTT	1320
H L L V R D V K K S N L P P D Y H I S L	460
CAT CTG CTG GTG AGG GAT GTG AAA AAG AGC AAC CTT CCG CCT GAT TAC CAC ATC AGC CTC	1380
I D I G L V L E Y L M G G A Y R C N Y T	480
ATA GAC ATC GGG CTC GTG CTG GAG TAC CTC ATG GGA GGA GCC TAC CGC TGC AAC TAC ACT	1440
R K N F R T L Y N N L F G P K R P K A L	500
CGG AAA AAC TTT CGG ACC CTT TAC AAC AAC TTG TTT GGA CCA AAG AGG CCT AAA GCT CTT	1500
K L L G M E D D E P P A K G K K K K K	520
AAA CTT CTG GGA ATG GAA GAT GAT GAG CCT CCA GCT AAA GGG AAG AAA AAA AAA AAG	1560
K K E E I D I D V D D P A V S R F Q Y	540
AAA AAG GAG GAA GAG ATC GAC ATT GAT GTG GAC GAC CCT GCC GTG AGT CGG TTC CAG TAT	1620
P F H E L M V W A V L M K R Q K M A V F	560
CCC TTC CAC GAG CTG ATG GTG TGG GCA GTG CTG ATG AAA CGC CAG AAA ATG GCA GTG TTC	1680
L W Q R G E E S M A K A L V A C K L Y K	580
CTC TGG CAG CGA GGG GAA GAG AGC ATG GCC AAG GCC CTG GTG GCC TGC AAG CTC TAC AAG	1740
A M A H E S S E S D L V D D I S Q D L D	600
GCC ATG GCC CAC GAG TCC TCC GAG AGT GAT CTG GTG GAT GAC ATC TCC CAG GAC TTG GAT	1800
N N S K D F G Q L A L E L L D Q S Y K H	620
AAC AAT TCC AAA GAC TTC GGC CAG CTT GCT TTG GAG TTA TTA GAC CAG TCC TAT AAG CAT	1860

FIG. 5C

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

D E Q I A M K L L L T Y E L K N W S N S T 640
GAC GAG CAG ATC GCT ATG AAA CTC CTG ACC TAC GAG CTG AAA AAC TGG AGC AAC TCG ACC 1920

C L K L A V A A K H R D F I A H T C S Q 660
TGC CTC AAA CTG GCC GTG GCA GCC AAA CAC CGG GAC TTC ATT GCT CAC ACC TGC AGC CAG 1980

M L L T D M W M G R L R M R K N P G L K 680
ATG CTG CTG ACC GAT ATG TGG ATG GGA AGA CTG CGG ATG CGG AAG AAC CCC GGC CTG AAG 2040

V I M G I L L L P P T I L F L E F R T Y D 700
GTT ATC ATG GGG ATT CTT CTA CCC CCC ACC ATC TTG TTT TTG GAA TTT CGC ACA TAT GAT 2100

D F S Y Q T S K E N E D G K E K E E E N 720
GAT TTC TCG TAT CAA ACA TCC AAG GAA AAC GAG GAT GGC AAA GAA GAA GAG GAA AAT 2160

T D A N A D A G S R K G D E E N E H K K 740
ACG GAT GCA AAT GCA GAT GCT GGC TCA AGA AAG GGG GAT GAG GAG AAC GAG CAT AAA AAA 2220

Q R I I P I G T K I C K F Y N A P I V K 760
CAA AGA ATT ATC CCC ATC GGA ACA AAA ATC TGT AAA TTC TAT AAC GCG CCC ATT GTC AAG 2280

F W F Y T I S Y L G Y L L L F N Y V I L 780
TTC TGG TTT TAC ACA ATA TCA TAC TTG GGC TAC CTG CTG CTG CTG TTT AAC TAC GTC ATC CTG 2340

V R M D G W P S L Q E W I V I S Y I V S 800
GTG CGG ATG GAT GGC TGG CCG TCC CTC CAG GAG TGG ATC GTC ATC TCC TAC ATC GTG AGC 2400

L A L E K I R E I L M S E P G K L S Q K 820
CTG GCG TTA GAG AAG ATA CGA GAG ATC CTC ATG TCA GAA CCA GGC AAA CTC AGC CAG AAA 2460

FIG. 5D

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

I K V W L Q E Y W N I T D L V A I S T F 840
ATC AAA GTT TGG CTT CAG GAG TAC TGG AAC ATC ACA GAT CTC GTG GCC ATT TCC ACA TTC 2520

M I G A M A T R S V M M I G K M M I D M 860
ATG ATT GGA GCA ATG GCC ACG AGA TCT GTG ATG ATG ATT GGA AAG ATG ATG ATC GAC ATG 2580

L Y F V V I M L L V V L M S F G V A R Q A 880
CTG TAC TTT GTG GTC ATC ATG CTG ATG CTC GTG CTC ATG AGT TTC GGA GTA GCC CGT CAA GCC 2640

I L H P E E K P S W K L A R N I F Y M P 900
ATT CTG CAT CCA GAG GAG AAG CCC TCT TGG AAA CTG GCC CGA AAC ATC TTC TAC ATG CCC 2700

Y W M I Y G E V F A D Q I D L Y A M E I 920
TAC TGG ATG ATC TAT GGA GAG GTG TTT GCA GAC CAG ATA GAC CTC TAC GCC ATG GAA ATT 2760

N P P C G E N L Y D E E G K R L P P C I 940
AAT CCT CCT TGT GGT GAG AAC CTA TAT GAT GAG GGC AAG CGG CTT CCT CCC TGT ATC 2820

P G A W L T P A L M A C Y L L V A N I L 960
CCC GGC GCC TGG CTC ACT CCA GCA CTC ATG GCG TGC TAT CTA CTG GTC GCC AAC ATC CTG 2880

L V N L L I A V F N N T F F E V K S I S 980
CTG GTG AAC CTG CTG ATT GCT GTG TTC AAC AAT ACC TTC TTT GAA GTA AAA TCA ATA TCC 2940

N Q V W K F Q R Y Q L I M T F H D R P V 1000
AAC CAG GTG TGG AAG TTC CAG CGA TAT CAG CTG ATT ATG ACA TTT CAT GAC AGG CCA GTC 3000

L P P P M I I L S H I Y I I M R L S G 1020
CTG CCC CCA CCG ATG ATC ATT TTA AGC CAC ATC TAC ATC ATC ATT ATG CGT CTC AGC GGC 3060

R C R K K R E G D Q E E R D R G L K L F 1040
CGC TGC AGG AAA AAG AGA GAA GGG GAC CAA GAG GAA CGG GAT CGT GGA TTG AAG CTC TTC 3120

FIG. 5E

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

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COMPOSITIONS AND METHODS FOR THE DIAGNOSIS,
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PROGRESSION

L S D E E L K R L H E F E E Q C V Q E H 1060
CTT AGC GAC GAG CTA AAG AGG CTG CAT GAG TTC GAG GAG CAG TGC GTG CAG GAG CAC 3180

F R E K E D E Q Q S S S D E R I R V T S 1080
TTC CGG GAG AAG GAG GAT GAG CAG CAG TCG TCC AGC GAG GAG CGC ATC CGG GTC ACT TCT 3240

E R V E N M S M R L E E I N E R E T F M 1100
GAA AGA GTT GAA AAT ATG TCA ATG AGG TTG GAA GAA ATC AAT GAA AGA GAA ACT TTT ATG 3300

K T S L Q T V D L R L A Q L E E L S N R 1120
AAA ACT TCC CTG CAG ACT GTT GAC CTT CGA CTT GCT CAG CTA GAA GAA TTA TCT AAC AGA 3360

M V N A L E N L A G I D R S D L I Q A R 1140
ATG GTG AAT GCT CTT GAA AAT CTT GCG GGA ATC GAC AGG TCT GAC CTG ATC CAG GCA CGG 3420

S R A S S E C E A T Y L L R Q S S I N S 1160
TCC CGG GCT TCT TCT GAA TGT GAG GCA ACG TAT CTT CTC CGG CAA AGC AGC ATC AAT AGC 3480

A D G Y S L Y R Y H F N G E E L L F E D 1180
GCT GAT GGC TAC AGC TTG TAT CGA TAT CAT TTT AAC GGA GAA GAG TTA TTA TTT GAG GAT 3540

T S L S T S P G T G V R K K T C S F R I 1200
ACA TCT CTC TCC ACG TCA CCA GGG ACA GGA GTC AGG AAA ACC ACC TGT TCC TTC CGT ATA 3600

K E E K D V K T H L V P E C Q N S L H L 1220
AAG GAA GAG AAG GAC GTG AAA ACG CAC CTA GTC CCA GAA TGT CAG AAC AGT CTT CAC CTT 3660

S L G T S T S A T P D G S H L A V D D L 1240
TCA CTG GGC ACA AGC ACA TCA GCA ACC CCA GAT GGC AGT CAC CTT GCA GTA GAT GAC TTA 3720

FIG. 5F

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

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Applicant(s): Andrew W. Shyjan

COMPOSITIONS AND METHODS FOR THE DIAGNOSIS,
PREVENTION AND TREATMENT OF TUMOR
PROGRESSION

K N A E E S K L G P D I G I S K E D D E 1260
AAG AAC GCT GAA GAG TCA AAA TTA GGT CCA GAT ATT GGG ATT TCA AAG GAA GAT GAT GAA 3780

R Q T D S K K E E T I S P S L N K T D V 1280
AGA CAG ACA GAC TCT AAA AAA GAA GAA ACT ATT TCC CCA AGT TTA AAT AAA ACA GAT GTG 3840

I H G Q D K S D V Q N T Q L T V E T T N 1300
ATA CAT GGA CAG GAC AAA TCA GAT GTT CAA AAC ACT CAG CTA ACA GTG GAA ACG ACA AAT 3900

I E G T I S Y P L E E T K I T R Y F P D 1320
ATA GAA GGC ACT ATT TCC TAT CCC CTG GAA GAA ACC AAA ATT ACA CGC TAT TTC CCC GAT 3960

E T I N A C K T M K S R S F V Y S R G R 1340
GAA ACG ATC AAT GCT TGT AAA ACA ATG AAG TCC AGA AGC TTC GTC TAT TCC CGG GGA AGA 4020

K L V G G G V N Q D V E Y S S I T D Q Q L 1360
AAG CTG GTC GGT GGG GTT AAC CAG GAT GTA GAG TAC AGT TCA ATC ACG GAC CAG CAA TTG 4080

T T E W Q C Q V Q K I T R S H S T D I P 1380
ACG ACG GAA TGG CAA TGC CAA GTT CAA AAG ATC ACG CGC TCT CAT AGC ACA GAT ATT CCT 4140

Y I V S E A A V Q A E Q K E Q F A D M Q 1400
TAC ATT GTG TCG GAA GCT GCA GTG CAA GCT GAG CAA AAA GAG CAG TTT GCA GAT ATG CAA 4200

D E H H V A E A I P R I P R L S L T I T 1420
GAT GAA CAC CAT GTC GCT GAA GCA ATT CCT CGA ATC CCT CGC TTG TCC CTA ACC ATT ACT 4260

D R N G M E N L L S V K P D Q T L G F P 1440
GAC AGA AAT GGG ATG GAA AAC TTA CTG TCT GTG AAG CCA GAT CAA ACT TTG GGA TTC CCA 4320

S L R S K S L H G H P R N V K S I Q G K 1460
TCT CTC AGG TCA AAA AGT TTA CAT GGA CAT CCT AGG AAT GTG AAA TCC ATT CAG GGA AAG 4380

L D R S G H A S S V S S L V I V S G M T 1480
TTA GAC AGA TCT GGA CAT GCC AGT AGT GTA AGC AGC TTA GTA ATT GTG TCT GGA ATG ACA 4440

A E E K K V K K E K A S T E T E C (SEQ ID NO: 7) 1497
GCA GAA GAA AAA AAG GTT AAG AAA GAG AAA GCT TCC ACA GAA ACT GAA TGC TAG TCTGTT 4991

TTGTTTCTTTTAAATTTTTTTTTTTTAAACAGTCAGAACCACTAATGGGTGTCATCTTGGCCATCCTAAACATCCCAAT

TTCCATAAAACATTTTCCCT (SEQ ID NO: 6)

FIG. 5G

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

ACTCATATAGGNTGAGCGGCGCGGGCAGGTTTGGCTGTGCCCCTCTCCATTCCACTGCTGTGGCAGGGTCAGA
AATCTTGATAGAGAAACCTTTTGCAACCGGGAATGTATCTTTGTAATCTCTAGCACGAAAGACTCTTAACAGGTGTTG
CTGTGGCCAGTTACCAACAGCATATCCCCCTCTGCCAAGTGAACACCCAGCAAAAATGAAGAGGAAAGCAACAG
GTGGAGACTCAGCCTGAGAAATGGTCTGTGTGCAAGCACACCCAGAGCTACCCCAACAGATTCTCTATGGAGTTCTTGAATT
CCAGGGTGGCGGATATTCCAATAAGCC

M Y I R V S Y D T K P D S L L H L M V K 20
ATG TAT ATC CGT GTA TCC TAT GAC ACC AAG CCA GAC TCA CTG CTC CAT CTC ATG GTG AAA 60

D W Q L E L P K L L I S V H G G L Q N F 40
GAT TGG CAG CTG GAA CTC CCC AAG CTC TTA ATA TCT GTG CAT GGA GGC CTC CAG AAC TTT 120

E M Q P K L K Q V F G K G L I K A A M T 60
GAG ATG CAG CCC AAG CTG AAA CAA GTC TTT GGG AAA GGC CTG ATC AAG GCT GCT ATG ACC 180

T G A W I F T G G V S T G V I S H V G D 80
ACC GGG GCC TGG ATC TTC ACC GGG GGT GTC AGC ACA GGT GTT ATC AGC CAC GTA GGG GAT 240

A L K D H S S K S R G R V C A I G I A P 100
GCC TTG AAA GAC CAC TCC AAG TCC AGA GGC CGG GTT TGT GCT ATA GGA ATT GCT CCA 300

W G I V E N K E D L V G K D V T R V Y Q 120
TGG GGC ATC GTG GAG AAT AAG GAA GAC CTG GTT GGA AAG GAT GTA ACA AGA GTG TAC CAG 360

T M S N P L S K L S V L N N S H T H F I 140
ACC ATG TCC AAC CCT CTA AGT AAG CTC TCT GTG CTC AAC AAC TCC CAC ACC CAC TTC ATC 420

L A D N G T L G K Y G A E V K L R R L L 160
CTG GCT GAC AAT GGC ACC CTG GGC AAG TAT GGC GCC GAG GTG AAG CTG CGA AGG CTG CTG 480

E K H I S L Q K I N T R L G Q G V P L V 180
GAA AAG CAC ATC TCC CTC CAG AAG ATC AAC ACA AGA CTG GGG CAG GGC GTG CCC CTC GTG 540

G L V V E G G P N V V S I V L E Y L Q E 200
GGT CTC GTG GTG GAG GGG CCT AAC GTG GTG TTC ATC GTC TTG GAA TAC CTG CAA GAA 600

FIG. 6A

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

E P P I P V V I C D G S G R A S D I L S 220
GAG CCT CCC ATC CCT GTG GTG ATT TGT GAT GGC AGC GGA CGT GCC TCG GAC ATC CTG TCC 660

F A H K Y C E E G G I I N E S L R E Q L 240
TTT GCG CAC AAG TAC TGT GAA GAA GGC GGA ATA ATA AAT GAG TCC CTC AGG GAG CAG CTT 720

L V T I Q K T F N Y N K A Q S H Q L F A 260
CTA GTT ACC ATT CAG AAA ACA TTT AAT TAT AAT AAG GCA CAA TCA CAT CAG CTG TTT GCA 780

I I M E C M K K K E L V T V F R M G S E 280
ATT ATA ATG GAG TGC ATG AAG AAG AAA GAA CTA CTC GTC ACT GTG TTC AGA ATG GGT TCT GAG 840

G Q Q D I E M A I L T A L L K G T N V S 300
GGC CAG CAG GAC ATC GAG ATG GCA ATT TTA ACT GCC CTG CTG AAA GGA ACA AAC GTA TCT 900

A P D Q L S L A L A W N R V D I A R S Q 320
GCT CCA GAT CAG CTG AGC TTG GCA CTG GCT TGG AAC CGC GTG GAC ATA GCA CGA AGC CAG 960

I F V F G P H W T P L G S L A P P T D S 340
ATC TTT GTC TTT GGG CCC CAC TGG ACG CCC CTG GGA AGC CTG GCA CCC CCG ACG GAC AGC 1020

K A T E K E K P P M A T T K G G R G K 360
AAA GCC ACG GAG AAG GAG AAG CCA CCC ATG GCC ACC ACC AAG GGA AGA GGA AAA 1080

G K G K K K G K V K E E V E E T D P R 380
GGG AAA GGC AAG AAG AAA GGG AAA GTG AAA GAG GAA GTG GAG GAA ACT GAC CCC CGG 1140

K I E L L N W V N A L E Q A M L D A L V 400

FIG. 6B

APPROVED	O.G. FIG.
BY	CLASS
DRAFTSMAN	SUBCLASS

AAG ATA GAG CTG AAC TGG GTG AAT GCT TTG GAG CAA GCG ATG CTA GAT GCT TTA GTC 1200
L D R V D F V K L L I E N G V N M Q H F 420
TTA GAT CGT GTC GAC TTT GTG AAG CTC CTG ATT GAA AAC GGA GTG AAC ATG CAA CAC TTT 1260
L T I P R L E E L Y N T R L G P P N T L 440
CTG ACC ATT CCG AGG CTG GAG GAG CTT TAT AAC ACA AGA CTG GGT CCA CCA AAC ACA CTT 1320
H L L V R D V K K S N L P P D Y H I S L 460
CAT CTG CTG GTG AGG GAT GTG AAA AAG AGC AAC CTT CCG CCT GAT TAC CAC ATC AGC CTC 1380
I D I G L V L E Y L M G G A Y R C N Y T 480
ATA GAC ATC GGG CTC GTG CTG GAG TAC CTC ATG GGA GGA GCC TAC CGC TGC AAC TAC ACT 1440
R K N F R T L Y N N L F G P K R P K A L 500
CGG AAA AAC TTT CGG ACC CTT TAC AAC AAC TTG TTT GGA CCA AAG AGG CCT AAA GCT CTT 1500
K L L G M E D D E P P A K G K K K K K 520
AAA CTT CTG GGA ATG GAA GAT GAT GAG CCT CCA GCT AAA GGG AAG AAA AAA AAA AAG 1560
K K E E I D I D V D D P A V S R F Q Y 540
AAA AAG GAG GAA GAG ATC GAC ATT GAT GTG GAC GAC CCT GCC GTG AGT CGG TTC CAG TAT 1620
P F H E L M V W A V L M K R Q K M A V F 560
CCC TTC CAC GAG CTG ATG GTG TGG GCA GTG CTG ATG AAA CGC CAG AAA ATG GCA GTG TTC 1680
L W Q R G E E S M A K A L V A C K L Y K 580
CTC TGG CAG CGA GGG GAA GAG AGC ATG GCC AAG GCC CTG GTG GCC TGC AAG CTC TAC AAG 1740
A M A H E S S E S D L V D D I S Q D L D 600
GCC ATG GCC CAC GAG TCC TCC GAG AGT GAT CTG GTG GAT GAC ATC TCC CAG GAC TTG GAT 1800
N N S K D F G Q L A L E L L D Q Q S Y K H 620
AAC AAT TCC AAA GAC TTC GGC CAG CTT GCT TTG GAG TTA TTA GAC CAG TCC TAT AAG CAT 1860

FIG. 6C

APPROVED	O.G. FIG.
BY	CLASS
DRAFTSMAN	SUBCLASS

Appn No.: 08/862,442

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Applicant(s): Andrew W. Shyjan

COMPOSITIONS AND METHODS FOR THE DIAGNOSIS,
PREVENTION AND TREATMENT OF TUMOR
PROGRESSION

D E Q I A M K L L T Y E L K N W S N S T 640
 GAC GAG CAG ATC GCT ATG AAA CTC CTG ACC TAC GAG CTG AAA AAC TGG AGC AAC TCG ACC 1920

 C L K L A V A A K K H R D F I A H T C S Q 660
 TGC CTC AAA CTG GCC GTG GCA GCC AAA CAC CGG GAC TTC ATT GCT CAC ACC TGC AGC CAG 1980

 M L L T D M W M G R L R M R K N P G L K 680
 ATG CTG CTG ACC GAT ATG TGG ATG GGA AGA CTG CGG ATG CGG AAG AAC CCC GGC CTG AAG 2040

 V I M G I L L P P T I L F L E F R T Y D 700
 GTT ATC ATG GGG ATT CTT CTA CCC ACC ACC ATC TTG TTT TTG GAA TTT CGC ACA TAT GAT 2100

 D F S Y Q T S K E N E D G K E K E E E N 720
 GAT TTC TCG TAT CAA ACA TCC AAG GAA AAC GAG GAT GGC AAA GAA GAA GAG GAA AAT 2160

 T D A N A D A G S R K G D E E N E H K K 740
 ACG GAT GCA AAT GCA GAT GCT GGC TCA AGA AAG GGG GAT GAG GAG AAC GAG CAT AAA AAA 2220

 Q R I I P I G T K I C K F Y N A P I V K 760
 CAA AGA ATT ATC CCC ATC GGA ACA AAA ATC TGT AAA TTC TAT AAC GCG CCC ATT GTC AAG 2280

 F W F Y T I S Y L G Y L L L F N Y V I L 780
 TTC TGG TTT TAC ACA ATA TCA TAC TTG GGC TAC CTG CTG CTG TTT AAC TAC GTC ATC CTG 2340

 V R M D G W P S L Q E W I V I S Y I V S 800
 GTG CGG ATG GAT GGC TGG CCG TCC CTC CAG GAG TGG ATC GTC ATC TCC TAC ATC GTG AGC 2400

 L A L E K I R E I L M S E P G K L S Q K 820
 CTG GCG TTA GAG AAG ATA CGA GAG ATC CTC ATG TCA GAA CCA GGC AAA CTC AGC CAG AAA 2460

FIG. 6D

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

Applicant(s): Andrew W. Shyjan

COMPOSITIONS AND METHODS FOR THE DIAGNOSIS,
PREVENTION AND TREATMENT OF TUMOR
PROGRESSION

I K V W L Q E Y W N I T D L V A I S T F	840
ATC AAA GTT TGG CTT CAG GAG TAC TGG AAC ATC ACA GAT CTC GTG GCC ATT TCC ACA TTC	2520
M I G A I L R L Q N Q P Y M G Y G R V I	860
ATG ATT GGA GCA ATT CTT CGC CTA CAG AAC CAG CCC TAC ATG GGC TAT GGC CGG GTG ATC	2580
Y C V D I I F W Y I R V L D I F G V N K	880
TAC TGT GTG GAT ATC ATC TTC TGG TAC ATC CGT GTC CTC GAC ATC TTT GGT GTC AAC AAG	2640
Y L G P Y V M M I G K M M I D M L Y F V	900
TAT CTG GGG CCA TAC GTG ATG ATG ATT GGA AAG ATG ATG ATC GAC ATG CTC GTG TAC TTT GTG	2700
V I M L V V L M S F G V A R Q A I L H P	920
GTC ATC ATG CTG GTC CTC ATG AGT TTC GGA GTA GCC CGT CAA GCC ATT CTG CAT CCA	2760
E E K P S W K L A R N I F Y M P Y W M I	940
GAG GAG AAG CCC TCT TGG AAA CTG GCC CGA AAC ATC TTC TAC ATG CCC TAC TGG ATG ATC	2820
Y G E V F A D Q I D L Y A M E I N P P C	960
TAT GGA GAG GTG TTT GCA GAC ATA GAC CTC TAC GCC ATG GAA ATT AAT CCT CCT TGT	2880
G E N L Y D E E G K R L P P C I P G A W	980
GGT GAG AAC CTA TAT GAT GAG GAG GGC AAG CGG CTT CCT CCC TGT ATC CCC GGC GCC TGG	2940
L T P A L M A C Y L L V A N I L L V N L	1000
CTC ACT CCA GCA CTC ATG GCG TGC TAT CTA CTG GTC GCC AAC ATC CTC GTG AAC CTG	3000
L I A V F N N T F F E V K S I S N Q V W	1020
CTG ATT GCT GTG TTC AAC AAT ACT TTC TTT GAA GTA AAA TCA ATA TCC AAC CAG GTG TGG	3060
K F Q R Y Q L I M T F H D R P V L P P P	1040
AAG TTC CAG CGA TAT CAG CTG ATT ATG ACA TTT CAT GAC AGG CCA GTC CTC CCC CCA CCG	3120

FIG. 6E

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

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D V K T H L V P E C Q N S L H L S L G T 1260
GAC GTG AAA ACG CAC CTA GTC CCA GAA TGT CAG AAC AGT CTT CAC CTT TCA CTG GGC ACA 3780

S T S A T P D G S H L A V D D L K N A E 1280
AGC ACA TCA GCA ACC CCA GAT GGC AGT CAC CTT GCA GTA GAT GAC TTA AAG AAC GCT GAA 3840

E S K L G P D I G I S K E D D E R Q T D 1300
GAG TCA AAA TTA GGT CCA GAT ATT GGG ATT TCA AAG GAA GAT GAT GAA AGA CAG ACA GAC 3900

S K K E E T I S P S L N K T D V I H G Q 1320
TCT AAA AAA GAA GAA ACT ATT TCC CCA AGT TTA AAT AAA ACA GAT GTG ATA CAT GGA CAG 3960

D K S D V Q N T Q L T V E T T N I E G T 1340
GAC AAA TCA GAT GTT CAA AAC ACT CAG CTA ACA GTG GAA ACG ACA AAT ATA GAA GGC ACT 4020

I S Y P L E E T K I T R Y F P D E T I N 1360
ATT TCC TAT CCC CTG GAA GAA ACC AAA ATT ACA CGC TAT TTC CCC GAT GAA ACG ATC AAT 4080

A C K T M K S R S F V Y S R G R K L V G 1380
GCT TGT AAA ACA ATG AAG TCC AGA AGC TTC GTC TAT TCC CGG GGA AGA AAG CTG GTC GGT 4140

G V N Q D V E Y S S I T D Q Q L T T E W 1400
GGG GTT AAC CAG GAT GTA GAG TAC AGT TCA ATC ACG GAC CAG CAA TTG ACG ACG GAA TGG 4200

Q C Q V Q K I T R S H S T D I P Y I V S 1420
CAA TGC CAA GTT CAA AAG ATC ACG CGC TCT CAT AGC ACA GAT ATT CCT TAC ATT GTG TCG 4260

E A A V Q A E Q K E Q F A D M Q D E H H 1440
GAA GCT GCA GTG CAA GCT GAG CAA AAA GAG CAG TTT GCA GAT ATG CAA GAT GAA CAC CAT 4320

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FIG. 6G

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

V A E A I P R I P R I P R I P R L S L T I T D R N G 1460
GTC GCT GAA GCA ATT CCT CGA ATC CCT CGC TTG TCC CTA ACC ATT ACT GAC AGA AAT GGG 4380

M E N L L S V K P D Q T L G F P S L R S 1480
ATG GAA AAC TTA CTG TCT GTG AAG CCA GAT CAA ACT TTG GGA TTC CCA TCT CTC AGG TCA 4440

K S L H G H P R N V K S I Q G K L D R S 1500
AAA AGT TTA CAT GGA CAT CCT AGG AAT GTG AAA TCC ATT CAG GGA AAG TTA GAC AGA TCT 4500

G H A S S V S S L V I V S G M T A E E K 1520
GGA CAT GCC AGT AGT GTA AGC AGC TTA GTA ATT GTG TCT GGA ATG ACA GCA GAA GAA AAA 4560

K V K K E K A S T E T E C * (SEQ ID NO: 9) 1533
AAG GTT AAG AAA GAG AAA GCT TCC ACA GAA ACT GAA TGC TAG TCCTGTTTGTCTTCTTAATTTT 4599

TTTTTTAAACAGTCAGAAACCCACTAATGGGGTGTCATCTTGGGCCCATCCTAAACACATMTCCAATTTCTCTAAAAACATTT
TCCCT

(SEQ ID NO: 8)

FIG. 6H